

## A New Frog of the Genus *Hyla* from British Guiana

COLEMAN J. GOIN

A SMALL, brilliantly marked tree frog from British Guiana has been called to my attention by Miss A. G. C. Grandison, for whom this attractive little species is named.

*Hyla grandisonae*, sp. nov.

*Type.* British Museum (Nat. Hist.) 1938.10.3.25, collected from a leaf of a shrub in the forest at Mazaruni, British Guiana, by J. Smart.

*Diagnosis.* A small *Hyla* with reduced webbing between the fingers, a well developed patagium, and brilliant white dorsal surfaces of the upper arms. Perhaps most closely related to *Hyla rondoniae* Bokermann (1963) and *Hyla bokermanni* Goin (1960), but readily distinguished from both of these by the more strongly developed vomerine teeth, the larger choanae, the bright white dorsal surfaces of the upper arms, and the lack of oval white spots on the anterior faces of the thighs.

*Description of type.* Vomerine teeth in two rather long, heavy, series, lying close together between the posterior halves of the rather large rounded choanae; tongue three-fourths as wide as mouth-opening, wider than long, its posterior border fused and nearly straight. Snout short, rounded when viewed from above, markedly truncate in profile, the upper jaw extending slightly beyond lower; nostrils more lateral than superior, considerably projecting, their distance from end of snout about one-third that from eye, separated from each other by an interval nearly equal to their distance from eye. Canthus rostralis well defined, curved; loreal region concave and nearly vertical, the upper lip flaring out slightly below it. Eye large, very prominent, its diameter equal to its distance from nostril; palpebral membrane not reticulate; inter-orbital distance about equal to width of upper eyelid, which is relatively wide and about equal to distance between nostrils. Tympanum very distinct, about three-fifth the diameter of eye, separated from eye by a distance equal to about one-half its own diameter. Fingers webbed at base, fourth a disk's length longer than second, just reaching to disk of third, which covers about two-thirds the tympanic area; no projecting rudiment of a pollex; no

ulnar ridge; toes more than one-half webbed, the web on fourth toe reaching the base of the penultimate phalanx, and that on third and fifth toes reaching the distal end of their penultimate phalanges; third and fifth toes subequal, disk of fourth covering about one-third the tympanic area; a distinct oval inner, but no distinct outer, metatarsal tubercle; no tarsal ridge; no dermal appendage on heel. Body not elongate, in post-axillary region distinctly narrower than greatest width of head; when hind leg is adpressed, heel reaches almost to nostril; when limbs are laid along the side, knee and elbow considerably overlap; when hind legs are bent at right angles to body, heels overlap slightly. A well developed patagium extends from the back of the upper arm to the side of the body. Skin of upper parts smooth; a distinct glandular ridge passes above tympanum where it then turns downward and terminates; skin of throat and chest smooth, that of belly and lower surface of thigh uniformly and very finely granular; no traces of a skinfold across chest; adult male vocal sac apparently internal. Skin of head not coossified with skull, roof of skull not exostosed.

*Dimensions.* Head and body 20.8; head length 9.4; head width 8.3; femur 9.8; tibia 10.4; heel-to-toe 11.0 mm.

*Color in alcohol.* A very strikingly marked little frog. The dorsal ground color is dark brown with the under surfaces of the chin, throat, and body gray. There is a rather distinct rounded white spot on the occipital region, and the dorsal surfaces of the upper arms are clear white. The patagium, while not white like the dorsal surfaces of the upper arms, is unpigmented. The left heel has been injured, but there is a short white line on the right heel.

*Discussion.* This species is certainly related to the group of small, dark, brightly patterned South American hylas, of which *H. parviceps* Boulenger (1882) seems to be the best known member. *H. grandisonae* seems structurally most like *H. rondoniae* and *H. bokermanni* but it differs from these in having slightly larger legs, a larger tympanum, heavier rows of vomerine teeth, and larger choanae. It differs from all these in dorsal pattern and in lacking oval white spots on the anterior faces of the thighs. From *parviceps* it differs further in having a well developed patagium, which *parviceps* lacks.

If, as I suspect, the development of a patagium is more indica-



Fig. 1. Dorsal view, side of head, roof of mouth, and underside of hand and foot of the type of *Hyla grandisonae*. Actual snout to vent length 20.8 mm.

tive of relationships than is pattern, we would find *H. rondoniae*, *bokermanni*, and *grandisonae* most closely related, with *H. parviceps* a more distantly related form. On the other hand *H. rondoniae*, *bokermanni*, and *parviceps* each have oval white spots on the anterior faces of their thighs, but the thighs of *H. grandisonae* are uniformly dark anteriorly.

*Acknowledgments.* I wish to thank Miss A. G. C. Grandison for the privilege of describing this species; Mr. Paul Laessle for the fine figure of the type specimen; and the National Science Foundation, who have supported my past work on South American tree frogs, for grant GB-3644 which made possible my work during the summer of 1965.

#### LITERATURE CITED

- BOKERMANN, W. C. A. 1963. Duas novas espécies de "Hyla" de Rondônia, Brasil (Amphibia, Salientia). Rev. Brasil. Biol., vol. 23, pp. 247-250, 6 figs.
- BOULENGER, G. A. 1882. Catalogue of the Batrachia Salientia s. Ecaudata in the collection of the British Museum. Ed. 2, pp. xvi + 503, 30 pls., many text figs.
- GOIN, C. J. 1960. Description of a new frog of the genus *Hyla* from northwestern Brazil. Ann. Mag. Nat. Hist., ser. 13, vol. 2, pp. 721-724, Dec., 1959, 1 fig.

*Department of Zoology, University of Florida, Gainesville, Florida.*